

IN THE CLAIMS

1. – 36. (Canceled)

37. (Previously Presented) A method, comprising:

generating a plurality of frame keys based on a session key generated for a transmission session within which a video content having a plurality of frames is to be transmitted to a video sink device, each of the frame keys being generated specifically for each of the frames respectively; and ciphering each of the frames using a respective one of the frame keys prior to transmitting the respective ciphered frame to the video sink device.

38. (Previously Presented) The method of claim 37, wherein each of the frame keys is generated during each vertical blanking interval of the video content.

39. (Previously Presented) The method of claim 38, further comprising generating a pseudo random bit sequence for each frame to cipher the respective frame of the video content using at least the respective frame key.

40. (Previously Presented) The method of claim 39, further comprising modifying the respective frame key according to a predetermined algorithm during a horizontal blanking interval of the respective frame to generate the pseudo random bit sequence.

41. (Previously Presented) The method of claim 39, further comprising deriving a random number from the pseudo random bit sequence, the derived random number being used to generate a frame key for a frame succeeding the corresponding frame.

42. (Previously Presented) The method of claim 41, wherein each of the frame keys is generated based on a random number derived from a pseudo random bit sequence of a preceding frame and the session key.

43. (Previously Presented) The method of claim 41, wherein each of the pseudo random bit sequences is generated based on a random number derived from a pseudo random bit sequence of a preceding frame and the frame key of a current frame.

44. (Previously Presented) The method of claim 37, further comprising generate the session key for the transmission session of the video content.

45. (Previously Presented) A machine-readable medium having executable code to cause a machine to perform a method, the method comprising:

generating a plurality of frame keys based on a session key generated for a transmission session within which a video content having a plurality of frames is to be transmitted to a video sink device, each of the frame keys being generated specifically for each of the frames respectively; and
ciphering each of the frames using a respective one of the frame keys prior to transmitting the respective ciphered frame to the video sink device.

46. (Previously Presented) The machine-readable medium of claim 45, wherein each of the frame keys is generated during each vertical blanking interval of the video content.

47. (Previously Presented) The machine-readable medium of claim 46, wherein the method further comprises generating a pseudo random bit sequence for each frame to cipher the respective frame of the video content using at least the respective frame key.

48. (Previously Presented) The machine-readable medium of claim 47, wherein the method further comprises modifying the respective frame key according to a predetermined algorithm during a horizontal blanking interval of the respective frame to generate the pseudo random bit sequence.

49. (Previously Presented) The machine-readable medium of claim 47, wherein the method further comprises deriving a random number from the pseudo random bit sequence, the derived random number being used to generate a frame key for a frame succeeding the corresponding frame.

50. (Previously Presented) The machine-readable medium of claim 49, wherein each of the frame keys is generated based on a random number derived from a pseudo random bit sequence of a preceding frame and the session key.

51. (Previously Presented) The machine-readable medium of claim 49, wherein each of the pseudo random bit sequences is generated based on a random number derived from a pseudo random bit sequence of a preceding frame and the frame key of a current frame.

52. (Previously Presented) The machine-readable medium of claim 45, further comprising generate the session key for the transmission session of the video content.

53. (Previously Presented) An apparatus comprising:

a block cipher to generate a plurality of frame keys based on a session key generated for a transmission session within which a video content having a plurality of frames is to be transmitted to a video sink device, each of the frame keys being generated for each of the frames respectively; and
a stream cipher coupled to the block cipher to cipher each of the frames using a respective frame key prior to transmitting the respective frame to the video sink device.

54. (Previously Presented) The apparatus of claim 53, wherein the stream cipher further generates a pseudo random bit sequence for each frame using at least the corresponding frame key, the pseudo random bit sequence being used to cipher the respective frame.

55. (Previously Presented) The apparatus of claim 53, wherein the stream cipher comprises a register to successively store a frame key associated with each frame.

56. (Previously Presented) The apparatus of claim 55, wherein the stream cipher further comprises a stream key section coupled to the register to be programmed with a frame key, to generate first data bits to successively modify the register stored frame key to facilitate generation of the pseudo random bit sequence for the frame.

57. (Previously Presented) The apparatus of claim 55, wherein the stream cipher further comprises a first function block coupled to the register to successively transform a stored frame key and a second function block coupled to the register to generate a pseudo random bit sequence for the corresponding frame using a selected subset of each of the transformed states of the frame key.

58. (Previously Presented) The apparatus of claim 53, wherein the block cipher comprises a first and a second registers to store a first and a second values, and a function block coupled to the first and second registers to transform the stored first and second values, with a selected one of the transformed first and second values being one of the session key and a frame key.

59. (Previously Presented) The apparatus of claim 58, wherein the block cipher is an integral part of the stream cipher.

60. (Previously Presented) A method, comprising:
generating a plurality of frame keys based on a session key generated for a reception session within which a video content having a plurality of frames is to be received from a video source device, each of the frame keys being generated for each of the frames within the reception session; and
deciphering each of the frames using the corresponding frame key as a decipher key to recover the respective frame of the video content.

61. (Previously Presented) The method of claim 60, wherein each of the frame keys are generated at each vertical blanking interval of the video content.

62. (Previously Presented) The method of claim 61, further comprising generating a pseudo random bit sequence for each frame using at least the corresponding frame key to decipher the respective frame of the video content.

63. (Previously Presented) The method of claim 62, further comprising successively modifying the respective frame key during a horizontal blanking interval of the respective frame.

64. (Previously Presented) The method of claim 62, further comprising deriving a random number from the pseudo random bit sequence, the derived random number being used to generate a frame key for a frame succeeding the corresponding frame.

65. (Previously Presented) The method of claim 62, wherein each of the frame keys is generated based on a random number derived from a pseudo random bit sequence of a preceding frame and the session key.

66. (Previously Presented) The method of claim 65, wherein each of the pseudo random bit sequences is generated based on a random number derived from a pseudo random bit sequence of a preceding frame and the frame key of a current frame.

67. (Previously Presented) A machine-readable medium having executable code to cause a machine to perform a method, the method comprising:

generating a plurality of frame keys based on a session key generated for a reception session within which a video content having a plurality of frames is to be received from a video source device, each of the frame keys being generated for each of the frames within the reception session; and
deciphering each of the frames using the corresponding frame key as a decipher key to recover the respective frame of the video content.

68. (Previously Presented) The machine-readable medium of claim 67, wherein each of the frame keys are generated at each vertical blanking interval of the video content.

69. (Previously Presented) The machine-readable medium of claim 68, wherein the method further comprises generating a pseudo random bit sequence for each frame using at least the corresponding frame key to decipher the respective frame of the video content.

70. (Previously Presented) The machine-readable medium of claim 69, wherein the method further comprises successively modifying the respective frame key during a horizontal blanking interval of the respective frame.

71. (Previously Presented) The machine-readable medium of claim 69, wherein the method further comprises deriving a random number from the pseudo random bit sequence, the derived random number being used to generate a frame key for a frame succeeding the corresponding frame.

72. (Previously Presented) The machine-readable medium of claim 69, wherein each of the frame keys is generated based on a random number derived from a pseudo random bit sequence of a preceding frame and the session key.

73. (Previously Presented) The machine-readable medium of claim 72, wherein each of the pseudo random bit sequences is generated based on a random number derived from a pseudo random bit sequence of a preceding frame and the frame key of a current frame.

74. (Previously Presented) An apparatus, comprising:
a block decipher to generate a plurality of frame keys based on a session key of a reception session within which a video content having a plurality of frames is to be received from a video source device, each of the frame keys being generated for each of the frames respectively; and
a stream decipher coupled to the block decipher to decipher each of the frames of the video content using each of the frame keys respectively.

75. (Previously Presented) The apparatus of claim 74, wherein the stream decipher further generates a pseudo random bit sequence for each frame using at least the corresponding frame key, the pseudo random bit sequence being used to decipher the respective frame of the video content.

76. (Previously Presented) The apparatus of claim 74, wherein the stream decipher comprises a register to successively store a frame key associated with each frame.

77. (Previously Presented) The apparatus of claim 76, wherein the stream decipher further comprises a stream key section coupled to the register to be programmed with a frame key associated with the respective frame, to generate first data bits to successively modify the register stored frame key to facilitate generation of the pseudo random bit sequence for the frame.

78. (Previously Presented) The apparatus of claim 76, wherein the stream decipher further comprises a first function block coupled to the register to successively transform a stored frame key, and a second function block coupled to the register to generate the pseudo random bit sequence for the corresponding frame using a selected subset of each of the transformed states of the frame key.

79. (Previously Presented) The apparatus of claim 76, wherein the block decipher comprises a first and a second registers to store a first and a second values, and a function block coupled to the first and second registers to successively transform the stored first and second values, with a selected one of the transformed first and second values being the session key or a frame key.

80. (Previously Presented) The apparatus of claim 79, wherein the block decipher is an integral part of the stream decipher.

81. (Previously Presented) A machine-readable medium having executable code to cause a machine to perform a method of a video source device, the method comprising:

generating a session key for a transmission session within which a multi-frame video content is to be transmitted to a video sink device;
generating a successive number of frame keys, using at least the session key, each of the frame keys being distinctively generated for each of the frames of the transmission session; and
ciphering each of the frames using the corresponding frame key prior to transmitting the respective ciphered frame to the video sink device.

82. (Previously Presented) The machine-readable medium of claim 81, wherein said generating of successive frame keys comprises generating at each vertical blanking interval of said multi-frame video content, a frame key for ciphering a frame of said multi-frame video content.

83. (Previously Presented) The machine-readable medium of claim 82, wherein said method further comprises generating a pseudo random bit sequence for each frame, using at least the corresponding frame key, for ciphering the particular frame of said multi-frame video content.

84. (Previously Presented) The machine-readable medium of claim 83, wherein the method further comprises modifying the corresponding frame key according to a predetermined algorithm during a horizontal blanking interval of the respective frame, to generate the pseudo random bit sequence.

85. (Previously Presented) The machine-readable medium of claim 83, wherein the method further comprises deriving a random number from the pseudo random bit sequence, the derived random number being used to generate a frame key for a frame succeeding the corresponding frame.

86. (Previously Presented) The machine-readable medium of claim 85, wherein each of the frame keys is generated based on a random number derived from a pseudo random bit sequence of a preceding frame and the session key.

87. (Previously Presented) The machine-readable medium of claim 85, wherein each of the pseudo random bit sequences is generated based on a random number derived from a pseudo random bit sequence of a preceding frame and the frame key of a current frame.

88. (Previously Presented) A machine-readable medium having executable code to cause a machine to perform a method of a video sink device, the method comprising::

generating a session key for a reception session within which a multi-frame video content is to be received from a video source device, the session key being valid only for the reception session;

generating a successive number of frame keys, using at least the session key, each of the frame keys being distinctively generated for each of the frames within the reception session; and

deciphering each of the frames using the corresponding frame key as a decipher key to recover the multi-frame video content.

89. (Previously Presented) The machine-readable medium of claim 88, wherein said generating of successive frame keys comprises generating at each vertical blanking interval of said multi-frame video content, a frame key for deciphering a frame of said multi-frame video content.

90. (Previously Presented) The machine-readable medium of claim 89, wherein said method further comprises generating a pseudo random bit sequence for each frame, using at least the corresponding frame key, for deciphering the particular frame of said multi-frame video content.

91. (Previously Presented) The method of claim 90, wherein each of said generating of a pseudo random bit sequence using a corresponding frame key comprises successive modifications of the frame key during a horizontal blanking interval of the respective frame.

92. (Previously Presented) The method of claim 90, further comprising deriving a random number from the pseudo random bit sequence, the derived random number being used to generate a frame key for a frame succeeding the corresponding frame.

93. (Previously Presented) The method of claim 90, wherein each of the frame keys is generated based on a random number derived from a pseudo random bit sequence of a preceding frame and the session key.

94. (Previously Presented) The method of claim 93, wherein each of the pseudo random bit sequences is generated based on a random number derived from a pseudo random bit sequence of a preceding frame and the frame key of a current frame.